Recovery Plan Action Status

Plan Name: Draft Recovery Plan for the Least Bell's Vireo

Plan Status: Draft Plan Date: 06-May-98 Lead Agency: USFWS

Lead Office Carlsbad Fish And Wildlife Office 431-9440)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
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Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Least Bell's vireo Vireo bellii pusillus)		1.111	Prepare management plan for the Tijuana River population	Partially Complete	FY 1995 - FY 1999		California Department of Parks and Recreation, California Department of Transportation, California State Lands Commission, City of San Diego, California, San Diego County, California, San Diego County Department of Parks and Recreation, California Coastal Commission, International Boundary and Water Commission, San Diego Association of Governments, San Diego County Vector Control, San Diego Gas and Electric, City of San Ysidro, California, Tijuana Valley Water Board, San Diego Regional Water Quality Control Board, U.S. Bureau of Land Management, U.S. Department of Justice, U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Environmental Protection Agency, U.S. Forest Service, U.S. Army Corps of Engineers, United States Navy	Management: Planning	Internal Technical Assistance, Species Expert	MSCP (especially City of San Diego Subarea) includes general provisions for management in the Tijuana River

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Least Bell's vireo (Vireo bellii pusillus)	1	1.112	Prepare management plan for the Dulzura Creek/Jamul Creek/Otay River population	Partially Complete	Prior to FY 1995		California Department of Transportation, California State Lands Commission, City of Chula Vista, California, San Diego County, California, California State Water Resources Control Board, San Diego County Department of Parks and Recreation, California Coastal Commission, Otay Water District, San Diego Association of Governments, San Diego County Vector Control, San Diego County Water Authority, San Diego Gas and Electric, San Diego Regional Water Quality Control Board, U.S. Bureau of Land Management, U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Environmental Protection Agency, U.S. Forest Service, U.S. Army Corps of Engineers	Management: Planning	Internal Technical Assistance, Species Expert	San Diego MSCP, Chula Vista Subarea Plan (Area-specific management directives for Otay River forthcoming), MSCP County Subarea Plan covers creeks

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Least Bell's vireo (Vireo bellii pusillus)		1.113	Prepare management plan for Sweetwater River population	Partially Complete	FY 1995 - FY 1999		California Department of Transportation, California State Lands Commission, City of Chula Vista, California, San Diego County, California, State Water Resources Control Board, Sweetwater Authority (a water district), San Diego County Department of Parks and Recreation, California Coastal Commission, City of National City, California, Otay Water District, San Diego Association of Governments, San Diego County Vector Control, San Diego County Water Authority, San Diego Gas and Electric, Sycuan Indian Reservation, San Diego Regional Water Quality Control Board, U.S. Bureau of Land Management, U.S. Geological Survey, Biological Resources Division, U.S. Bureau of Indian Affairs, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Environmental Protection Agency, U.S. Forest Service, U.S. Army Corps of Engineers		Contract, Internal Technical Assistance, Species Expert	Sweetwater Authority URDS II BO; HCP in development. SDNWR mgmt.

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Least Bell's vireo (Vireo bellii pusillus)	1	1.114	Prepare management plan for the San Diego River population	Partially Complete	Prior to FY 1995		California Department of Transportation, California State Lands Commission, City of San Diego, California, San Diego County, California State Water Resources Control Board, Helix Water District, San Diego County Department of Parks and Recreation, California Coastal Commission, Capitan Grande Indian Reservation, City of Lakeside, California, Metropolitan Transit Development Board, Padre Dam Municipal Water District, San Diego Association of Governments, City of Santee, California, San Diego County Vector Control, San Diego County Vector Control, San Diego County Water Authority, San Diego Gas and Electric, City of San Diego Parks and Recreation Department, City of San Diego Water Utilities District, San Diego Regional Water Quality Control Board, U.S. Bureau of Land Management, U.S. Federal Highway Administration, U.S. Geological Survey, Biological Resources Division, U.S. Bureau of Indian Affairs, U.S. Fish and Wildlife Service, California Department of Fish	Management: Planning	Contract, Internal Technical Assistance, Species Expert	USGS San Diego on contract, TransNet funds. Also San Diego MSCP, City of SD Subarea Plan.

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							and Game, U.S. Environmental Protection Agency, U.S. Forest Service, U.S. Army Corps of Engineers			

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Least Bell's vireo (Vireo bellii pusillus)		1.115	Prepare management plan for the San Luis Rey River population	Partially Complete	Prior to FY 1995		California Department of Transportation, California State Lands Commission, San Diego County, California, California State Water Resources Control Board, Vista Irrigation District, San Diego County Department of Parks and Recreation, California Coastal Commission, Escondido Municipal Water Company, Fallbrook Utilities District, La Jolla Indian Reservation, City of Oceanside, California, Pauma Indian Reservation, Pala Indian Reservation, Rincon Indian Reservation, Rincon Indian Reservation, San Diego Association of Governments, San Diego County Vector Control, San Diego County Vector Control, San Diego County Water Authority, San Diego Gas and Electric, San Luis Rey Municipal Water District, Valley Center Municipal Water District, Pauma Mutual Water Company, San Diego Regional Water Quality Control Board, U.S. Bureau of Land Management, U.S. Federal Highway Administration, U.S. Geological Survey, Biological Resources Division, U.S. Bureau of Indian Affairs, U.S. Fish and Wildlife Service, California Department of Fish	Management: Planning	Contract, Internal Technical Assistance, Species Expert	Operation and Maintenance of the San Luis Rey River Flood Control (FWS-SDG-1366.20)

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							and Game, U.S. Environmental Protection Agency, U.S. Forest Service, U.S. Army Corps of Engineers, United States Marine Corps , United States Navy			

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Least Bell's vireo (Vireo bellii pusillus)	1	1.116	Prepare management plan for the Camp Pendleton/Santa Margarita population	Ongoing Current	FY 2007		California Department of Parks and Recreation, California Department of Transportation, California State Lands Commission, Orange County, California, Riverside County, California, San Diego County, California State Water Resources Control Board, California Coastal Commission, Atchison Topeka and Santa Fe Railroad, Fallbrook Utilities District, City of Murrietta, California, City of Oceanside, California, Rainbow Municipal Water District, San Diego Association of Governments, Southern California Edison, City of San Clemente, California, San Diego County Water Authority, City of Temecula, California, Cahuilla Indian Reservation, San Diego Regional Water Quality Control Board, U.S. Bureau of Land Management, U.S. Department of Defense, U.S. Federal Aviation Administration, U.S. Federal Highway Administration, U.S. Geological Survey, Biological Resources Division, U.S. Bureau of Indian Affairs, U.S. Fish and Wildlife	Management: Planning	Contract, Internal Technical Assistance, Species Expert	MCB Camp Pendleton INRMP (revised 2007), though not a plan specifically reated to manage LBVs, includes provisions for managment of riparian area and LBV habitat; implments "Riparian BO".

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
							Service, California Department of Fish and Game, U.S. Environmental Protection Agency, U.S. Forest Service, U.S. Army Corps of Engineers, United States Marine Corps, United States Navy			

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Least Bell's vireo (Vireo bellii pusillus)	1	1.117	Prepare management plan for Santa Ana River population	Partially Complete	FY 1995 - FY 1999		California Department of Conservation, California Department of Parks and Recreation, California Department of Transportation, California State Lands Commission, Orange County, California, Santa Ana Regional Water Quality Control Board, California State Water Resources Control Board, California State Water Resources Control Board, California State Water Resources Control Board, California, Atchison Topeka and Santa Fe Railroad, Chino Basin Municipal Water District, City of Corona, California, Orange County Water District, Riverside County Water District, Riverside County Regional Parks and Open Space District, City of Redlands, California, San Bernardino Association of Governments, Santa Ana Watershed Project Authority, San Bernardino County Flood Control, City of San Bernardino, California, Southern California Edison, Western Municipal Water District, Western Riverside County Water Riverside County	Management: Planning	Contract, Internal Technical Assistance, Species Expert	SAWA and ACOE implementing site-specific projects. For example, "Prado Mainstem BO" (FWS-SB-909.6)

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							Regional			
							Wastewater			
							Authority, West			
							Valley Vector			
							Control District,			
							U.S. Bureau of			
							Land Management,			
							U.S. Federal Aviation			
							Administration,			
							U.S. Geological			
							Survey, Biological			
							Resources			
							Division, U.S. Fish			
							and Wildlife			
							Service, California			
							Department of Fish			
							and Game, U.S.			
							Environmental			
							Protection Agency,			
							U.S. Forest			
							Service, U.S. Army			
							Corps of Engineers			

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east Bell's vireo Vireo bellii pusillus)	1	1.118	Prepare management plan for the Orange County/Los Angeles County metapopulaion	Partially Complete	FY 1995 - FY 1999		California Department of Conservation, California Department of Parks and Recreation, California Department of Parks and Recreation, California Department of Transportation, California State Lands Commission, Los Angeles County, California, Orange County, California, Santa Ana Regional Water Quality Control Board, California State Water Resources Control Board, Southern Pacific Railroad, County Sanitation Districts of Los Angeles County, Los Angeles County Department of Health Services, Los Angeles County Department of Public Works, Los Angeles County Department of Public Works, Los Angeles County Water District, Orange County Vector Control District, Orange County Water District, Southern California Edison, Los Angeles Regional Water Quality Control Board, U.S. Bureau of Land Management, U.S. Department of Defense, U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Environmental Protection Agency, U.S. Forest	Management: Planning	Contract, Internal Technical Assistance, Species Expert	project-spefic actions

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							Service, U.S. Army Corps of Engineers			

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Least Bell's vireo (Vireo bellii pusillus)	1	1.119	Prepare management plan for the Santa Clara River population	Partially Complete	Prior to FY 1995		California Department of Conservation, California Department of Parks and Recreation, California Department of Parks and Recreation, California Department of Transportation, California Department of Water Resources, California State Lands Commission, Los Angeles County, California, Southern Pacific Railroad, California Coastal Commission, County Sanitation Districts of Los Angeles County, City of Fillmore, California, Los Angeles County Department of Health Services, Los Angeles County Department of Public Works, City of Santa Clarita, California, City of Santa Clarita, California, United Water Conservation District, Ventura County Flood Control District, Los Angeles Regional Water Quality Control Board, U.S. Bureau of Land Management, U.S. Department of Defense, U.S. Federal Highway Administration, U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Environmental Protection Agency, U.S. Forest	Management: Planning	Contract, Internal Technical Assistance, Species Expert	Santa Clara River Enhancement and Management Plan. Also, The Nature Conservancy purchasing and restoring lands.

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							Service, U.S. Army Corps of Engineers			
Least Bell's vireo (Vireo bellii pusillus)	1	1.120	Prepare management plan for the Santa Ynez River population	Not Started			Corps of Engineers California Department of Conservation, California Department of Parks and Recreation, California Department of Transportation, California Department of Water Resources, California State Lands Commission, California State Lands Commission, California State Under Resources Control Board, Southern Pacific Railroad, California Coastal Commission, City of Buelton, California, City of Lompoc, California, Santa Barbara County, California, Santa Barbara County, California, Santa Barbara County Water Agency, Central Coast Regional Water Quality Control Board, U.S. Bureau of Land Management, U.S. Department of Defense, U.S. Federal Highway Administration, U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S.	Management: Planning	Contract, Internal Technical Assistance, Species Expert	[Chris Dellith, VFWO, pers comm)
							Environmental Protection Agency, U.S. Forest Service, U.S. Army			
							Corps of Engineers, United States Air Force			

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east Bell's vireo /ireo bellii usillus)	1	1.121	Prepare management plan for the Anza Borrego Desert population	Partially Complete	FY 2005	Date	California Department of Conservation, California Department of Parks and Recreation, California Department of Parks and Recreation, California Department of Transportation, California State Lands Commission, Colorado Basin Regional Water Quality Control Board, Riverside County, California, San Diego County, California State Water Resources Control Board, California Coastal Commission, Imperial County, California Coastal Commission, Imperial County, California, Los Coyotes Indian Reservation, San Diego and Arizona Eastern Railroad, San Diego Gas and Electric, Santa Rosa Indian Reservation, U.S. Bureau of Land Management, U.S. Department of Defense, U.S. Federal Highway Administration, U.S. Geological Survey, Biological Resources Division, U.S. Bureau of Indian Affairs, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Environmental Protection Agency, U.S. Forest Service, U.S. Army Corps of		Contract, Internal Technical Assistance, Species Expert	The ABDSP General Plan, though not a plan specifically created to manage LBVs, includes provisions for managment of riparian area and LBV habitat.

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Least Bell's vireo (Vireo bellii pusillus)	2	1.122		Unknown	LSt. Illitiation Pate		Parties California Department of Conservation, California Department of Parks and Recreation, California Department of Transportation, California State Lands Commission, California State Lands Commission, California State Water Resources Control Board, Southern Pacific Railroad, California Coastal Commission, Monterey County, California, City of Salinas, California, San Benito County, California, San Luis Obispo County, California, Central Coast Regional Water Quality Control Board, U.S. Bureau of Land Management, U.S. Department of Defense, U.S. Federal Highway	Management: Planning	Contract, Internal Technical Assistance, Species Expert	Action Comments
							Administration, U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Environmental Protection Agency,			

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Least Bell's vireo (Vireo bellii pusillus)	2	1.123	Prepare management plan for the San Joaquin Valley population	Unknown			California Department of Conservation, California Department of Parks and Recreation, California Department of Transportation, California State Lands Commission, Central Valley Regional Water Quality Control Board, California State Water Resources Control Board, California Coastal Commission, U.S. Bureau of Land Management, U.S. Department of Defense, U.S. Federal Highway Administration, U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service, California		Contract, Internal Technical Assistance, Species Expert	
							Department of Fish and Game, U.S. Environmental Protection Agency, U.S. Forest			
							Service, U.S. Army Corps of Engineers			

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Least Bell's vireo (Vireo bellii pusillus)	2	1.124	Prepare management plan for the Sacramento Valley population	Unknown			California Department of Conservation, California Department of Parks and Recreation, California Department of Transportation, California State Lands Commission, Central Valley Regional Water Quality Control Board, California State Water Resources Control Board, California Coastal Commission, U.S. Bureau of Land Management, U.S. Department of Defense, U.S. Federal Highway Administration, U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Environmental Protection Agency, U.S. Forest Service, U.S. Army Corps of Engineers	Management: Planning	Contract, Internal Technical Assistance, Species Expert	
Least Bell's vireo (Vireo bellii pusillus)	2	1.2	Prepare management plans for areas identified in 2.1	Planned			To be determined	Management: Planning	Contract, Graduate Student, Internal Technical Assistance, Species Expert	Riparian Habitat Joint Venture
Least Bell's vireo (Vireo bellii pusillus)	2	1.3	Establish monitoring protocol	Not Started			U.S. Fish and Wildlife Service	Management: Population Monitoring, Research: Demographic Studies, Research: Ecosystem Studies, Research: Habitat Requirements, Research: Habitat Status, Research: Population Assessment	Contract, Graduate Student, Internal Technical Assistance, Species Expert	

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Least Bell's vireo (Vireo bellii pusillus)	2	1.411	Conduct annual monitoring in the Tijuana River Population	Ongoing Not Current	FY 1995 - FY 1999		U.S. Department of Justice, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers	Management: Population Monitoring	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Volunteer	monitoring will be required annually and 5 years beyond delisting
Least Bell's vireo (Vireo bellii pusillus)	2	1.412	Conduct annual monitoring the Dulzure Creek/Jamul Creek/otay River population	Ongoing Not Current	FY 1995 - FY 1999		U.S. Bureau of Land Management, U.S. Federal Highway Administration, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers	Management: Population Monitoring	Contract, Internal Field Assistance, Internal Technical Assistance, Volunteer	
Least Bell's vireo (Vireo bellii pusillus)	2	1.413	Conduct annual monitoring the Sweetwater River population	Ongoing Current	FY 1995 - FY 1999		U.S. Bureau of Land Management, U.S. Federal Highway Administration, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers	Management: Population Monitoring	Contract, Internal Field Assistance, Internal Technical Assistance, Volunteer	Sweetwater Authority, SDNWR
Least Bell's vireo (Vireo bellii pusillus)	2	1.414	Conduct annual monitoring in the San Diego River population	Ongoing Current	FY 2009		U.S. Federal Highway Administration, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers	Management: Population Monitoring	Contract, Internal Field Assistance, Internal Technical Assistance, Volunteer	USGS San Diego TransNet contract
Least Bell's vireo (Vireo bellii pusillus)	2	1.415	Conduct annual monitoring in the San Luis Rey River population	Partially Complete	FY 1995 - FY 1999		U.S. Federal Highway Administration, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, U.S. Forest Service, U.S. Army Corps of Engineers	Management: Population Monitoring	Contract, Internal Field Assistance, Internal Technical Assistance, Volunteer	USGS San Diego surveys portions

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Least Bell's vireo (Vireo bellii pusillus)	2	1.416	Conduct annual monitoring in the Camp Pendleton/Santa Margarita River	Ongoing Current	FY 2007		U.S. Department of Defense, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers	Management: Population Monitoring	Contract, Internal Field Assistance, Internal Technical Assistance	In 2011, Camp Pendleton LBV surveys were not implemented on time (i.e., starting at the beginning of April) due to a Marine Corps contracting error. Surveys not initiated until late June, continued through mid- August. Therefore, data for 2011 incomplete and not comparable to other years.
Least Bell's vireo (Vireo bellii pusillus)	2	1.417	Conduct annual monitoring in the Santa Ana River population	Ongoing Current	FY 1995 - FY 1999		California Department of Transportation, Orange County Water District, U.S. Federal Highway Administration, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers	Management: Population Monitoring	Contract, Internal Field Assistance, Internal Technical Assistance, Volunteer	SAWA
Least Bell's vireo (Vireo bellii pusillus)	2	1.418	Conduct annual monitoring in the Orange County/Los Angeles County population	Ongoing Not Current	FY 1995 - FY 1999		California Department of Transportation, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers	Management: Population Monitoring	Contract, Internal Field Assistance, Internal Technical Assistance, Volunteer	
Least Bell's vireo (Vireo bellii pusillus)	2	1.419	Conduct annual monitoring in the Santa Clara River population	Partially Complete			U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, U.S. Forest Service, U.S. Army Corps of Engineers	Management: Population Monitoring	Contract, Internal Field Assistance, Internal Technical Assistance, Volunteer	TNC, individual projects
Least Bell's vireo (Vireo bellii pusillus)	2	1.420	Conduct annual monitoring in the Santa Ynez population	Not Started			U.S. Department of Defense, U.S. Fish and Wildlife Service, U.S. Forest Service, United States Air Force	Management: Population Monitoring	Contract, Internal Field Assistance, Internal Technical Assistance, Volunteer	

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Least Bell's vireo (Vireo bellii pusillus)	2	1.421	Conduct annual monitoring in the Anza Borrego Desert metapopulation	Ongoing Not Current	FY 2000 - FY 2004		California Department of Parks and Recreation, U.S. Bureau of Land Management, U.S. Department of Defense, U.S. Fish and Wildlife Service	Management: Population Monitoring	Contract, Internal Field Assistance, Internal Technical Assistance, Volunteer	Anza-Borrego State Park LBV monitoring and BHCO trapping
Least Bell's vireo (Vireo bellii pusillus)	2	1.422	Conduct annual monitoring in the Salinas River population	Unknown			California Department of Transportation, U.S. Bureau of Land Management, U.S. Department of Defense, U.S. Fish and Wildlife Service	Management: Population Monitoring	Contract, Internal Field Assistance, Internal Technical Assistance, Volunteer	
Least Bell's vireo (Vireo bellii pusillus)	2	1.423	Conduct annual monitoring in the San Joaquin Valley population	Unknown			California Department of Transportation, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers	Management: Population Monitoring	Contract, Internal Field Assistance, Internal Technical Assistance, Volunteer	
Least Bell's vireo (Vireo bellii pusillus)	2	1.424	Conduct annual monitoring in the Sacramento Valley population	Unknown			California Department of Transportation, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, United States Air Force	Management: Population Monitoring	Contract, Internal Field Assistance, Internal Technical Assistance, Volunteer	

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Least Bell's vireo (Vireo bellii pusillus)	1	1.5	Continue cowbird removal	Partially Complete	FY 1995 - FY 1999		California Department of Parks and Recreation, California Department of Transportation, Orange County Water District, U.S. Department of Defense, U.S. Federal Highway Administration, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Forest Service, U.S. Army Corps of Engineers, United States Marine Corps, United States Navy	Management: Predator and Competitor Control	Contract, Volunteer	Being implemented on a project-by- project, site-specific basis.
Least Bell's vireo (Vireo bellii pusillus)	2	1.6	Develop alternative means of controlling cowbird parasitism	Ongoing Current	FY 2011		California Department of Transportation, City of San Diego, California, Riverside County, California, San Diego County, California, San Bernardino County, California, Orange County Water District, U.S. Bureau of Land Management, U.S. Department of Agriculture, U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Army Corps of Engineers, United States Marine Corps, United States Navy	Research: Demographic Studies, Research: Management Techniques, Research: Population Assessment	Contract, Graduate Student, Species Expert	Research funds from the SD Foundation are contributing to research on how to make cowbird trapping cost-effective.

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Least Bell's vireo (Vireo bellii pusillus)	2	1.7	Control nonnative plant species	Partially Complete	FY 1995 - FY 1999		California Department of Parks and Recreation, California Department of Transportation, Riverside County, California, San Diego County, California, Orange County Water District, Riverside County Regional Parks and Open Space District, U.S. Department of Agriculture, U.S. Federal Highway Administration, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Forest Service, U.S. Army Corps of Engineers, United States Marine Corps, United States Navy	Management: Habitat Maintenance and Manipulation	Contract, Internal Technical Assistance, Volunteer	Site-specific projects at multiple sites.
Least Bell's vireo (Vireo bellii pusillus)	3	1.8	Establish perpetual endowments for cowbird and exotic plant control	Partially Complete	FY 1995 - FY 1999		U.S. Fish and Wildlife Service	Acquisition: Management Agreement	Contract, Internal Technical Assistance	project-specific
Least Bell's vireo (Vireo bellii pusillus)	2	2.1	Identify additional and potential habitat in historical range	Unknown			California Department of Parks and Recreation, U.S. Bureau of Land Management, U.S. Department of Defense, U.S. Federal Highway Administration, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Army Corps of Engineers	Research: Habitat Status	Contract, Graduate Student, Internal Technical Assistance, Species Expert	Riparian Habitat Joint Venture

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Least Bell's vireo (Vireo bellii pusillus)	3	2.11	Conduct a statewide inventory of riparian habitat	Unknown			U.S. Department of Defense, U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, U.S. Forest Service, U.S. Army Corps of Engineers	Research: Habitat Status	Contract, Internal Technical Assistance, Species Expert	RHJV
Least Bell's vireo (Vireo bellii pusillus)	3	2.12	Conduct rangewide surveys	Not Started			U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service	Management: Population Monitoring	Contract, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Least Bell's vireo (Vireo bellii pusillus)	3	2.2	Investigate the status of wintering habitat and identify current or potential threats	Partially Complete			U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service	Research: Habitat Requirements, Research: Habitat Status, Research: Migration, Research: Population Assessment, Research: Population Surveys	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	Some survey work conducted in Baja California Sur. Surveys not comprehensive and limited by funding.
Least Bell's vireo (Vireo bellii pusillus)	3	2.31	Continue colorbanding to provide demographic and dispersal data	Partially Complete	FY 1995 - FY 1999		U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service	Management: Population Monitoring	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	USGS San Diego
Least Bell's vireo (Vireo bellii pusillus)	3	2.32	Determine relationships between population density and reproductive characteristics	Not Started			U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service	Research: Competition, Research: Demographic Studies	Contract, Graduate Student, Internal Technical Assistance, Species Expert	
Least Bell's vireo (Vireo bellii pusillus)	3	2.33	Determine relationships between population density and dispersal	Not Started			U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service	Research: Demographic Studies, Research: Habitat Requirements, Research: Population Surveys	Contract, Graduate Student, Internal Technical Assistance, Species Expert	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Least Bell's vireo (Vireo bellii pusillus)	3	2.4	Investigate relationship between habitat characteristics and least Bell's vireos behaviors and access to necessary resources	Partially Complete	FY 1995 - FY 1999		U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service	Research: Demographic Studies, Research: Habitat Requirements	Contract, Graduate Student, Species Expert	USGS San Diego
Least Bell's vireo (Vireo bellii pusillus)	2	2.5	Develop biocontrol methods for Arundo and other nonnative species	Partially Complete	FY 2009		Cornell University, International Institute of Biological Control, Orange County Water District, U.S. Bureau of Reclamation, U.S. Department of Agriculture, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, United States Marine Corps	Research: Competition, Research: Demographic Studies, Research: Dietary Studies, Research: Ecosystem Studies, Research: General, Research: Habitat Requirements, Research: Management Techniques, Research: Other Information	Contract, Internal Technical Assistance, Species Expert	APHIS biocontrol Final EA April 2009
Least Bell's vireo (Vireo bellii pusillus)	3	3.1	Implement long- term monitoring of restored sites	Partially Complete	FY 1995 - FY 1999		U.S. Department of Defense, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers	Management: Habitat Maintenance and Manipulation	Contract, Internal Technical Assistance, Species Expert, Volunteer	site-specific
Least Bell's vireo (Vireo bellii pusillus)	3	3.2	Develop improved restoration techniques	Ongoing Current	FY 1995 - FY 1999		U.S. Bureau of Reclamation, U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Army Corps of Engineers	Research: Habitat Requirements, Research: Reintroduction	Contract, Graduate Student, Internal Technical Assistance, Species Expert	
Least Bell's vireo (Vireo bellii pusillus)	3	3.3	Evaluate restoration efforts and effectiveness of methods used	Ongoing Current	FY 1995 - FY 1999		California Department of Parks and Recreation, U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Army Corps of Engineers	Research: Habitat Requirements	Contract, Graduate Student, Species Expert	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Least Bell's vireo (Vireo bellii pusillus)	3	3.4	Conduct habitat restoration	Ongoing Current	FY 1995 - FY 1999		U.S. Bureau of Land Management, U.S. Department of Defense, U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Army Corps of Engineers, United States Marine Corps, United States Navy	Management: Habitat Maintenance and Manipulation	Contract, Internal Technical Assistance, Volunteer	site-specific
Least Bell's vireo (Vireo bellii pusillus)	3	5	Evaluate progress of recovery, management and recovery actions, and revise management plans	Partially Complete	FY 1995 - FY 1999		U.S. Fish and Wildlife Service	Management: Planning	Contract, Internal Technical Assistance, Species Expert	
Least Bell's vireo (Vireo bellii pusillus)	3	6	Provide public information and education	Partially Complete	FY 1995 - FY 1999		U.S. Bureau of Land Management, U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service, U.S. Forest Service	Other: Information and Education	Contract, Internal Administrative, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	